

OCCURRENCE OF *SOLANDERIA FUSCA* (Gray, 1868) (HYDROZOA)
IN PORT PHILLIP BAY, VICTORIA

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Abstract

Solanderia fusca (Gray, 1868) is recorded for the first time from Victorian coastal waters. The specimens are briefly described and notes given on ecology.

Introduction

Ralph (1966) did not report *Solanderia fusca* among the hydroids examined by her. This hydroid was, however, taken during the survey, but because of its strong resemblance to the Gorgonacean octocorals, the specimens were included in the latter collections.

MATERIAL: Survey Area 59 (36) Popes Eye.

Class HYDROZOA

Suborder ATHECATA

Family SOLANDERIIDAE Marshall, 1892

Solanderia fusca (Gray, 1868)

Ceratella fusca Gray, 1868: 579, Fig. 2; Balch, 1884: 48-50; 1888: 748; Spencer, 1891: 8-24, Figs. 1-14.

Description

Three small colonies broken off from the rootstock were collected by SCUBA divers. The largest colony, roughly fan shaped, measures 10 cm in height and 11 cm in width (Pl. 1, fig. 1) and consists of two flexuous stems 3 mm in width united at the base, giving rise to a series of dense reticulating branches and branchlets, the whole colony flattened in the plane of growth.

The specimens show little difference in structure from the description given by Spenceer

(1891) of specimens from New South Wales, Lord Howe Is., and Flinders Is. in Bass Strait.

The large shelf-like hydropores are formed from a variable number (up to fifteen) of short spatulate spines connected together by a delicate chitinous web. Similar spines project thickly from the trabeculae of the branches, particularly in the older parts of the colony, giving the surface of the branch a characteristic prickly appearance (Pl. 1, fig. 2).

This was not noted by Spenceer, and it was thought possible that his specimens may have been water worn. However, examination of well-preserved material from both New South Wales and S. Australian waters showed the spines in these specimens to be poorly developed or missing altogether. Evidently, this feature may be a local variation of the species in Victorian waters.

The hydranths are moderately well extended, showing the randomly scattered capitate tentacles typical of the species, but are not sufficiently expanded to allow a tentacle count to be made. In young branches, the hydranths are alternate and prominently seated on the hydrophores, but in older branches this alternate arrangement tends to be lost, and both hydrophore and hydranth become increasingly submerged in the trabeculate meshwork of the branch. Branching in the distal parts of the

colony is roughly alternate. Each new branch begins from the outgrowth of the spines of a hydrophore, which elongate to form the basic, approximately longitudinal meshwork of the branch. Colour: older stems and branches dark brown, shading through lighter brown to almost white at the growing tips. Hydranths white. The colonies are infertile.

Remarks

Solanderia fusca is a conspicuous athecate hydroid of the southern Australian coastline, with a present known distribution from Sydney, N.S.W., to the Great Australian Bight (J.E.W.). Although it has not previously been recorded from Victorian coastal waters, it is found in and around Port Phillip Heads and is common at Popes Eye (Area 59) which is the northernmost extension of its range into Port Phillip Bay.

It favours fairly clear, well-agitated shallow ocean water, with a maximum development between 3 and 15 m, but is also occasionally found in deeper water, and in deep permanent tide pools in ocean shore platforms of Bass Strait.

It usually occurs in clusters of one to three stems growing outward from a spreading root-like base directly attached to vertical rocky faces, or downward from the underside of ledges.

Acknowledgements

We thank the Director, Mr J. McNally and Mrs J. Hope Black of the National Museum of Victoria for the opportunity to examine this material, and Mr Cha Araga for the photographs.

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Explanation of Plate 8

- Fig. 1—*Solanderia fusca* (Gray, 1868). Largest colony from Area 59, $\times 2/3$.
- Fig. 2—Detail of branches showing partly extended hydranths and spinous trabeculae. Younger branch at right shows shelf-like hydrophores $\times 20$.